

DOCKET NO.: 100933-1P US

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: **Bostwick et al.;**

U.S. National Stage of PCT/SE03/001978

International Filing Date: **December 17, 2003**

§ 371 Date: **June 16, 2005**

Group Art Unit: **Not yet assigned**

U.S. Application No.: **10/539,544**

Examiner: **Not yet assigned**

For: **INOSITOL PHOSPHATE DETECTION ASSAYS**

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Respectfully submitted,



Date: October 18, 2005

**Robin S. Quartin, Ph.D.**  
Attorney for Applicants  
Registration No. **45,028**  
(302) 885-9129

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Total Number of Pages in This Submission

Application Number	10/539,544
Filing Date	June 16, 2005
First Named Inventor	Bostwick
Art Unit	Not yet assigned
Examiner Name	Not yet assigned
Attorney Docket Number	100933-1P US

**ENCLOSURES (Check all that apply)**

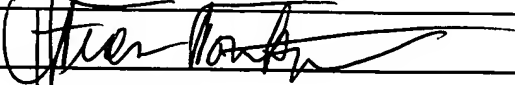
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Firm Name	AstraZeneca Pharmaceuticals		
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Date	October 18, 2005	Reg. No.	45,028

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## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet	1	of	1
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**Complete if Known**

Application Number	10/539,544
Filing Date	06/16/2005
First Named Inventor	Bostwick
Art Unit	Not yet assigned
Examiner Name	Not yet assigned
Attorney Docket Number	100933-1P IIS

## U. S. PATENT DOCUMENTS

[illegible]

## FOREIGN PATENT DOCUMENTS

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**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

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Sheet

1

of

3

**Complete If Known**

Application Number

10/539,544

Filing Date

06/16/2005

First Named Inventor

Bostwick

Art Unit

Not yet assigned

Examiner Name

Not yet assigned

Attorney Docket Number

100933-1P US

**NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
		LENNART ANDERSSON ET AL., "Isolation of Phosphoproteins by Immobilized Metal (Fe3.1) Affinity Chromatography," Analytical Biochemistry, Vol 154, 1986, p. 250-254	
		ALBERT J. BAUKAL ET AL., "Binding Sites for Inositol Trisphosphate in the Bovine Adrenal Cortex," Biochem. Biophys. Res. Commun., Vol. 133 ( No. 2), 1985, p. 532-538	
		MICHAEL J. BERRIDGE ET AL., "Lithium Amplifies Agonist-dependent Phosphatidylinositol Responses in Brain and Salivary Glands," Biochem. J., Vol 206, 1982, p. 587-595	
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		GRIGORY CHAGA ET AL., "Purification and Determination of the Binding Site of Lactate Dehydrogenase from Chicken Breast Muscle on Immobilized Ferric Ions," Journal of Chromatography, Vol 627, 1992, p. 163-172	
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		STEPHEN K. FISHER ET AL., "Inositol Lipids and Signal Transduction in the Nervous System: An Update," J. Neurochem, Vol 58, 1992, p. 18-38	
		VLADKA GABERC-POREKAR ET AL., "Perspectives of Immobilized-metal Affinity Chromatography," J. Biochem. Biophys. Methods, Vol 49, 2001, p. 335-360	

Examiner Signature		Date Considered	
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Substitute for form 1449B/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)				<b>Complete If Known</b>	
				Application Number	10/539,544
				Filing Date	06/16/2005
				First Named Inventor	Bostwick
				Art Unit	Not yet assigned
				Examiner Name	Not yet assigned
Sheet	2	of	3	Attorney Docket Number	100933-1P US

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
		GAITAN GUILLEMETTE ET AL., "Inositol 1,4,5-trisphosphate Binds to a Specific Receptor and Releases Microsomal Calcium in the Anterior Pituitary Gland," Proc. Natl. Acad. Sci. U.S.A., Vol 84, 1987, p. 8195-8199	
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		KARSTEN HAUPT ET AL., "Immobilized Metal Ion Affinity Capillary Electrophoresis of Proteins - A Model for Affinity Capillary Electrophoresis Using Soluble Polymer-Supported Ligands", Analytical Biochemistry, Vol 234, 1996, p. 149-154	
		LEONARD D. HOLMES ET AL., "Immobilized Iron(III) Metal Affinity Chromatography for the Separation of Phosphorylated Macromolecules: Ligands and Applications", J. Liq. Chrom. & Rel. Technol., Vol 20, No. 1, 1997, page 123-142	
		ARLENE R. HUGHES ET AL., "Source of 3H-Labeled Inositol Bis- and Monophosphates in Agonist-activated Rat Parotid Acinar Cells", Journal of Biological Chemistry, Vol 264, No 16, 1989, p. 9400-9407	
		WEI JIANG ET AL., "Protein Interaction with Immobilized Metal Ion Affinity Ligands under High Ionic Strength Conditions", Analytical Biochemistry, Vol 242, 1996, p. 45-54	
		SHIHUA LI ET AL., "Iron(III)-Immobilized Metal Ion Affinity Chromatography and Mass Spectrometry for the Purification and Characterization of Synthetic Phosphopeptides", Analytical Biochemistry, Vol 270, 1999, p. 9-14	
		JAY JIE LIU ET AL., "An Immobilized Metal Ion Affinity Adsorption and Scintillation Proximity Assay for Receptor-stimulated Phosphoinositide Hydrolysis", Analytical Biochemistry, Vol 318, 2003, p. 91-99	
		JIE LIU ET AL., "Molecular Mechanisms Involved in Muscarinic Acetylcholine Receptor-mediated G Protein Activation Studied by Insertion Mutagenesis", Journal of Biological Chemistry, Vol 271, No 11, 1996, p. 6172-6178	
		GRAZYNA MUSZYNSKA ET AL., "Selective Adsorption of Phosphoproteins on Gel-Immobilized Ferric Chelate", Biochemistry, Vol 25, 1986, p. 6850-6853	

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# **INFORMATION DISCLOSURE STATEMENT BY APPLICANT**

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Sheet

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of

3

**Complete If Known**

Application Number

10/539,544

Filing Date

06/16/2005

First Named Inventor

Bostwick

Art Unit

Not yet assigned

Examiner Name

Not yet assigned

Attorney Docket Number

100933-1P US

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		JERKER PORATH ET AL., "Immobilized Metal Ion Affinity Adsorption and Immobilized Metal Ion Affinity Chromatography of Biomaterials. Serum Protein Affinities for Gel-Immobilized Iron and Nickel Ions", Biochemistry, Vol 22, 1983, p. 1621-1630	
		P. SCANFF ET AL., "Immobilized FE3+ Affinity Chromatographic Isolation of Phosphopeptides", Journal of Chromatography, Vol 539, 1991, p. 425-432	
		STEPHEN B. SHEARS, "Metabolism of Inositol Phosphates", Advances in Second Messenger and Phosphoprotein Research, Vol 26, 1992, p. 63-92, J.W. Putney, Jr. (ed.), Raven Press, New York	
		EUGENE SULKOWSKI, "Purification of Proteins by IMAC", Trends in Biotechnology, Vol 3, 1985, p. 1-7	
		EUGENE SULKOWSKI, "The Saga of IMAC and MIT", BioEssays, Vol 10, No 5, 1989, p. 170-175	
		ANN B. THEIBERT ET AL., "Demonstration of Inositol 1,3,4,5-Tetrakisphosphate Receptor Binding", Biochemical and Biophysical Research Communications, Vol 148, No 3, 1987, p. 1283-1289	
		HAVARD VIKO ET AL., "Effect of Concomitant B-Adrenoceptor Stimulation on $\alpha$ 1-Adrenoceptor-Mediated Increase of Inositol-1,4,5-trisphosphate Mass in Adult Rat Cardiomyocytes", Pharmacology & Toxicology, Vol 83, 1998, p. 23-28	
		TAI-TUNG YIP ET AL., "Immobilized metal Ion Affinity Chromatography", Methods in Molecular Biology, Vol 59, 1996, p. 197-210	
		International Search Report for International Application No. PCT/SE2003/001978	

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